CS 314-001 Operating Systems
Spring 2019
Quiz #3 on February 12, 2019 (SOLUTIONS)

Your Last Three Digits: ________________
(please do NOT write all of your student ID or your name)

Grade: ______

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(1) In the following sentence: “The long-term scheduler is the main component that controls _______ in multitasking operating systems”, fill out the blank by a phrase (sorry, it’s not a “word” – as we discussed in the classroom) that best fits to the blank.

“degree of multitasking”

(2) Show a sketch of the integration of the short-term, medium-term, and long-term process scheduling as a directed state-transition diagram.
(3) What is “Blocked” state in “the short-term process scheduling”?

It is the state for the processes that have been started and executed, but those that are currently waiting for some events, mostly I/O calls (such as inputs from keyboard and hard drive or output to a printer).

(4) How does “RR” process scheduling algorithm work?

Round Robin is a preemptive algorithm. Each process is executed for a set interval of time (called “processor slice time”) before moving to the next one and doing the same until all processes are completed. When a process is completed, it is removed from the rotation.

(5) What is “preemptive process scheduling”?

Preemptive process scheduling is a type of process scheduling that can takes a processor away from the process that is currently assigned a processor (even though the process does not finish or does not voluntarily release the processor).